



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/762,566

01/23/2004

Richard Franklin

20342/1202529-US1

3220

7278

7590

11/17/2008

DARBY & DARBY P.C.

P.O. BOX 770

Church Street Station

New York, NY 10008-0770

EXAMINER

HUGHES, ALICIA R

ART UNIT

PAPER NUMBER

1614

MAIL DATE

DELIVERY MODE

11/17/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/762,566	<b>Applicant(s)</b> FRANKLIN, RICHARD	
	<b>Examiner</b> ALICIA R. HUGHES	<b>Art Unit</b> 1614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 01 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 2,3,6-9,12-15,17-34,36 and 50 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 2,3,6-9,12-15,17-34,36 and 50 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Status of the Claims***

Claims 2, 3, 6-9, 12-15, 17-34, 36 and 50 are pending. Applicants' argument, filed on 24 July 2007, has been fully considered and it is deemed to be persuasive regarding previous rejection. Rejections and objections not reiterated from previous office actions are hereby withdrawn. Upon reconsideration of the pending claims, as presented, the following new rejections are applied. They constitute the complete set of rejections being applied to the instant application presently.

### ***Claim Rejections – 35 U.S.C. §103***

#### **I. First 103 Rejection**

Claims 2, 3, 6-9, 12, 17-20, 26-27, 32, 36 and 50 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,194,420 [hereinafter referred to as "Lang"], in view of U.S. Patent No. 6,221,383 [hereinafter referred to as "Miranda et al"], and in further view of U.S. Patent No. 6,024,975 [hereinafter referred to as "D'Angelo et al"], for reasons set forth in this Office's Action dated 19 April 2007 and 16 April 2008, as applied to the same claims, which reasons are herein incorporated by reference, in total.

The Applicant argues that thrombosis and thrombocytopenia are distinct conditions that may be treated by distinct pharmaceutical agents and as such, there is no reasonable expectation of success with the administration of transdermal anagrelide. The Examiner appreciates this argument as proffered by Applicants, but submits that the question of whether agents utilized the treat thrombosis and thrombocytopenia must necessarily be distinct is a question of fact rather

Art Unit: 1614

than that of law and is determined by a weight of the empirical evidence. While Applicant has chosen to focus on the differences between the conditions and in support has noted data to support his position, the office, rather chooses to weight the evidence that focuses on the similarities between the conditions and the overlap in treatments, including anagrelide and as such, maintains its previous position as noted in the Actions of 19 April 2007 and 16 April 2008.

Applicants also argue that the Miranda patent does not disclose anagrelide as a treatment of thrombosis but rather, only lists anagrelide once as one of over a dozen antithrombotic drugs and that D'Angelo does not describe or suggest the treatment or prevention of thrombocytopenia. Admittedly, D'Angelo is a broad patent, and it does list numerous agents, including anagrelide, most importantly. However, the breadth of the patent does not in any way diminish its teachings. Stated another way, it is well understood in the art that the comprehensiveness of a disclosure does not negate its value for teaching each of the individual elements disclosed.

Additionally, Applicant provides the declaration of Dr. Richard Franklin to bolster its claims of unexpected results. A re-examination of the results and as well, of Dr. Franklin's declaration, is not dispositive of the Office's previous position. The effect appears still to be additive rather than synergistic.

Applicant also argues that the individual references do not teach each and every limitation of the claims presented. The applicant is correct in that each individual reference does not meet each and every limitation of the claims. However, a showing of obviousness does not require the same, but only a motivation or suggestion. In light of the foregoing, it would have been *prima facie* obvious to one of ordinary skill in the art to combine the teachings of Lang, Miranda et al, and D'Angelo to conclude that the combination of anagrelide or its salt form,

Art Unit: 1614

along with a skin permeation enhancer, administered transdermally so as to avoid the first pass liver metabolism would be effective in the treatment of essential thrombocythemia.

Furthermore, it would have been *prima facie* obvious to one of ordinary skill in the art that the administration of a single or multiple layer formulation of an effective amount of anagrelide or an anagrelide salt and a menthol acting as a skin permeation enhancer with acrylic adhesive with a surface area ranging from 1 to 200 square centimeters acting together as a transdermal delivery device would be effective for treating essential thrombocythemia.

Accordingly, for the above reasons, the claims are deemed properly rejected.

## **II. Second 103 Rejection**

Claims 21-23, 28, and 30 are rejected under 35 U.S.C. 103(a) as being obvious over Lang in view of D'Angelo and in further view of U.S. Patent No. 5,133,972 [hereinafter referred to as "Ferrini et al"].

Applicant argues that while Ferrini describes topical administration, including transdermal administration, Ferrini does not describe or suggest anagrelide or the treatment of thrombocythemia.

The teachings of Lang and D'Angelo et al, *supra* and as stated in this Office's Action of 19 April 2007 and 16 April 2008, as well as the arguments herein, *supra*, are incorporated herein by reference, in total. The teachings of Ferrini et al, as noted in this Office's Action of 19 April 2007 are incorporated herein by reference in total, also.

Accordingly, for the above reasons, the claims are deemed properly rejected.

**III. Third 103 Rejection**

Claims 24-25, 29, 31, 33-34 and 36 are rejected under 35 U.S.C. 103(a) as being obvious over U.S. Patent No. 6,194,420 [hereinafter referred to as “Lang”] in view of U.S. Patent No. 6,024,975 [hereinafter referred to as “D’Angelo et al”]. and in further view of U.S. Patent No. 4,847,276 [hereinafter referred to as “Yarrington”].

The teachings of Lang and D’Angelo et al, *supra* and as noted in this Office’s Action of 16 April 2008, are incorporated herein by reference. One of ordinary skill in the art would be motivated to combine the teachings of Lang and D’Angelo et al with the teachings of Yarrington, because each contains overlapping subject matter, most notably treatment of a myeloproliferative disease, particularly essential thrombocythemia.

Applicant argues that “[a]nagrelide is briefly discussed in the background of [Yarrington] as a compound used to treat thrombocythemia without any discussion or suggestion of its mode of administration.” See Page 18 of Applicants Remarks of 19 September 2007.

As noted prior, Yarrington teach the treatment of thrombocythemia by the administration of 0.25 to 50 mg/kg/day of an active compound (Col. 6, lines 12-20 and 30-32, Cls. 9,10, and 13). Yarrington also teach the administration of 1.5 to 4.0 mg of anagrelide per day, with reasonable effectiveness of the drug evident after five days of administration (Col. 2, lines 9-14).

In view of the foregoing, it would have been *prima facie* obvious to one of ordinary skill in the art that the administration of 0.1 to 20 mg/kg/day of anagrelide and more particularly, 0.5 to 3 mg of anagrelide daily for at least 1 to 7 days via transdermal delivery would effectively treat essential thrombocythemia.

### ***Request for Rejoinder***

Applicant's Request for Rejoinder has been considered. However, since the examined claims are not allowable at this time, consideration of rejoinder is not deemed necessary.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Hughes whose telephone number is 571-272-6026. The examiner can normally be reached from 9:00 A.M. until 5:00 P.M. on Monday through Friday.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached at 571-272-0718. The fax number for the organization where this application is proceeding is assigned 571-273-8300.

Art Unit: 1614

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Alicia R. Hughes/  
Examiner, Art Unit 1614

/Raymond J Henley III/  
Primary Examiner, Art Unit 1614